IN THE CLAIMS:

Please amend claim 1, cancel claims 13-15, and add new claims 27-29 as follows.

1. (Currently Amended) A method for processing a transport stream comprising a plurality of time slots for transporting therein respective programs having a common time base indicated by periodically inserted time stamps, said method comprising:

modifying packets associated with a desired time slot of a received transport stream to produce an output transport stream; and

transmitting said output transport stream;

said transmitted output transport stream ~~includes~~ including respective modified programs having said common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein a modified packet uses a matching time stamp of said received transport stream.

2. (Previously Presented) The method of claim 1, wherein said modifying comprises replacing said packets associated with said desired time slot.

3. (Previously Presented) The method of claim 2, wherein initial and replacement packets associated with said desired time slot represent respective first and second programs.

4. Cancelled

5. (Previously Presented) The method of claim 3, wherein one of said first and second programs comprises a NULL program.

6. (Previously Presented) The method of claim 3, wherein the step of modifying packets further comprises:

(1) examining a packet received from said received transport stream to determine if a slot associated with said received packet corresponds to an insertion slot for said second program to be inserted;

(2) inserting, into an output transport stream, a next packet of said second program if said slot associated with said received packet corresponds to an insertion slot for said second program to be inserted;

(3) inserting, into said output transport stream, said received packet if said slot associated with said received packet does not correspond to an insertion slot for said second program to be inserted; and

(4) repeating steps (1) through (3) for each packet of said received transport stream until a replacement stream has been fully inserted into said output transport stream.

7. (Previously Presented) An apparatus for processing a received transport stream comprising N time slots for transporting therein N respective programs having a common time base indicated by periodically inserted time stamps, where N is an integer greater than one said apparatus comprising:

a transport clock source;

a frequency divider for dividing a timing signal from said transport clock source into N timing signals;

N transport encoders coupled to said frequency divider for respectively receiving and encoding said N programs; and

a multiplexer, coupled to an output of said N transport encoders, for receiving and modifying packets associated with a desired time slot of one or more transport encoded program streams, said multiplexer producing a processed transport stream, said processed transport stream including respective modified programs having said common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein a modified packet uses a matching time stamp of said received transport stream.

8. (Previously Presented) The apparatus of claim 7, wherein the each program is encoded at a clock rate of CLK/N.

9. (Previously Presented) The apparatus of claim 7, further comprising a file server coupled between said multiplexer and said N transport encoders for storing the transport encoded program streams.

10. (Previously Presented) The apparatus of claim 7, wherein said modifying comprises replacing said packets associated with said desired time slot.

11. Cancelled

12. (Previously Presented) Apparatus for processing a received transport stream comprising a plurality of time slots for transporting therein a respective plurality of programs having a common time base indicated by periodically inserted time stamps, said apparatus comprising:

a transport clock source;

a frequency divider, for dividing a transport clock timing signal from said transport clock source into a plurality of timing signals; and

a plurality of encoders, each of said encoders coupled to said frequency divider for respectively receiving and encoding said plurality of programs to produce a respective encoded program stream, each of said encoded program streams being coupled to a switch via a respective buffer memory;

said switch selectively coupling program stream transport packets from said buffer memories for modifying packets associated with a desired time slot to produce a slotted transport stream, said slotted transport stream including respective modified programs having said common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein a modified packet uses a matching time stamp of said received transport stream.

13. Cancelled

14. Cancelled

15. Cancelled

16. (Previously Presented) The apparatus of claim 12, further comprising:

a file server, for storing an encoded program stream and selectively providing said encoded program stream to said switch in response to a subscriber request for said encoded program stream;

said switch inserting said at least one encoded program stream received from said file server into a corresponding time slot.

17. (Previously Presented) The apparatus of claim 16, wherein an identification of the time slot includes said requested program stream provided to said requesting subscriber.

18. (Previously Presented) The apparatus of claim 12, wherein a bitrate of an encoded transport stream is adapted by adding NULL packets to the slotted transport stream.

19. (Previously Presented) The apparatus of claim 18, wherein a number of NULL packets to add is determined according to at least one of an insertion rate, a slot repetition period and a packet count.

20. (Previously Presented) The apparatus of claim 12, wherein a bitrate of an encoded transport stream is adapted by deleting program packets from the transport encoded transport stream.

21. (Previously Presented) The method of claim 1, further comprising:

storing, in a file server, at least one transport encoded program; and

in response to a subscriber request for a transport encoded program, including said requested transport encoded program within a respective time slot of said output transport stream being formed.

22. (Previously Presented) The method of claim 21, further comprising:

identifying, for said requesting subscriber, the time slot including said requested transport encoded program.

23. (Previously Presented) The method of claim 1, wherein a bitrate of said output transport stream is adjusted by deleting program packets and inserting NULL transport packets within said processed output transport stream.

24. (Previously Presented) The method of claim 23, wherein a number of NULL packets to insert is determined according to at least one of an insertion rate, a slot repetition period and a packet count.

25. (Previously Presented) The method of claim 23, wherein a number of program packets to delete is determined according to at least one of an deletion rate, a slot repetition period and a packet count.

26. (Previously Presented) The apparatus of claim 10, wherein initial and replacement packets associated with said desired time slot represent respective first and second programs.

27. (New) Apparatus for generating a transport stream comprising a plurality of programs, each of said programs having associated with it a respective time slot, said apparatus comprising:

a frequency divider, for dividing a transport clock timing signal into a plurality of timing signals; and

a plurality of encoders, each of said encoders encoding a program stream in response to a respective timing signal to produce a respective encoded program stream, each of said encoded program streams being coupled to a switch via a respective buffer memory;

said switch selectively coupling program stream transport packets from said buffer memories to produce a slotted transport stream, wherein each transport packet of

each program stream is separated by a transport packet from at least one other program stream; and

said switch selectively coupling program stream transport packets from said buffer memories for modifying packets associated with a desired time slot to produce a slotted transport stream, said slotted transport stream including respective modified programs having said common time base indicated by said periodically inserted time stamps provided by said received transport stream, wherein a modified packet uses a matching time stamp of said received transport stream.

28. (New) The apparatus of claim 27, wherein said corresponding time slot comprises an unused time slot.

29. (New) The apparatus of claim 28, wherein said unused time slot included NULL transport packets.